



California Independent Petroleum Association

1001 K Street, 6th Floor

Sacramento, CA 95814

Phone: (916) 447-1177

Fax: (916) 447-1144

February 10, 2014

Alison Dettmer, Deputy Director
California Coastal Commission
1385 8th Street, Suite 130
Arcata, CA 95521

Dear Ms. Dettmer:

The California Independent Petroleum Association (CIPA) submits the following comments relative to offshore well stimulation operations which will be discussed by the commission at its February 12 meeting in Pismo Beach. CIPA represents over 500 oil and natural gas producers, service and supplies companies, and royalty owners who have operations in California, including offshore.

As you will see below, hydraulic fracturing and other well stimulation techniques have been deployed in California without a negative impact on the environment for over forty years, including offshore. You are in receipt of a letter from the Center for Biological Diversity (CBD) that makes numerous erroneous claims relative to those operations. This letter addresses those erroneous claims and will demonstrate that off shore well stimulation, including hydraulic fracturing is well understood and fully regulated.

Well Stimulation Law and Statewide Studies

The recent Well Stimulation law, SB 4 (Pavley 2013), requires that the Natural Resources Agency, through DOGGR, arrange for an independent scientific study of hydraulic fracturing be conducted by January 1, 2015. This study is anticipated to be a comprehensive review of the environmental effects of well stimulation including hydraulic fracturing. It is our understanding that Commission staff are in dialogue with the Resources Agency regarding the content of this study. CIPA supports this approach, rather than an independent Commission study which would be repetitive and an unnecessary drain of commission time and resources. The Bureau of Land Management, in consultation with the California Center for Science and Technology is conducting an additional study of well stimulation on federal lands. These two studies along with the numerous existing studies that examine well stimulation (including ones specific to California) provide all the information the commission needs to make informed decisions on the topic.

Studies conducted so far, including the Baldwin Hills Study in Southern California, have not found a link between hydraulic fracturing and subsurface impacts such as induced seismicity, ground movement, vibration, well integrity, staying in zone, groundwater quality, methane migration, or public health.

Coastal Commission Jurisdiction—State Waters

CIPA believes that well stimulation, including hydraulic fracturing, does not qualify as “development” under the Coastal Act, and even if it did, the Commission’s authority to mitigate the impacts of well

stimulation through the coastal development permit process has been substantially constrained by the Legislature's adoption of SB 4, specifically the Legislature's delegation of authority to regulate "well stimulation treatments" including hydraulic fracturing to the Department of Conservation, Division of Oil, Gas and Geothermal Resources ("Division").

"Development," by its terms, does not apply to downhole oil and gas operations which occur below the surface of the land or, in the case of offshore operations, below the sea-bed. The term "development" applies specifically to activities which occur "on the land" or "in or under water." In contrast, well completion (or well stimulation treatment) techniques, including hydraulic fracturing, occur in deep geologic formations many thousands of feet below the surface of the land, or the sea-bed, as the case may be. In California, well stimulation treatments are ordinarily performed once, for a short period of time, prior to commencement of production, to increase the permeability of a hydrocarbon formation in order to improve the flow of oil or natural gas from the geologic stratum to the well. They occur after a well has been drilled, and the production-casing string has been set, cemented, and pressure-tested. Because well completion and well stimulation techniques occur downhole, for the purpose of increasing the permeability of a hydrocarbon formation, they are not operations which occur "on the land, in or under water," and thus are not "development" within the meaning of PRC § 30106.

As to surface impacts, new development would only be triggered in situations where the application of downhole well completion technique results in a substantial change to a previously existing or permitted surface condition or activity. Given that offshore operations are all conducted on platforms or drilling islands specifically designed and permitted for oil and gas operations, the minor and short-term nature of well stimulation has never to date constituted "new development". It is important to note that water handling for facilities in state waters is nearly exclusive to closed loop systems that bring produced water to onshore facilities through pipelines to be processed and disposed of onshore or the produced water is treated and reinjected. In either case, water is not released to the ocean.

Even if hydraulic fracturing were to qualify as new "development" under the Coastal Act, the Commission's jurisdiction is not unlimited. Where the Legislature has determined that certain matters are beyond its regulatory jurisdiction, the Commission is not authorized to act. (See e.g., *California Coastal Commission v. Quanta Investment Corp.* (1980) 113 Cal.App.3d 579 ["The Commission's attempt to exercise jurisdiction over stock cooperative conversions may be validated only if it was within the scope of the regulatory authority conferred by the Coastal Act of 1976."].) Where the Commission lacks legislative authorization, its acts are void. (*Buckley v. California Coastal Commission* (1998) 68 Cal.App.4th 178, 190-191 ["Because it lacked power to make any determination, the denial of a permit to the Buckleys was a void act that could be set aside at any time."].)

In the case of oil and gas operations occurring offshore within the coastal zone, the Legislature has included in the Coastal Act a specific limitation on the scope of the Commission's regulatory authority. As stated in PRC § 30418, the Division is the "principal state agency responsible for the drilling, operation, maintenance, and abandonment of all oil, gas and geothermal wells in the state."

Consequently, "[n]either the commission, local government, port governing body, or special district shall establish or impose such regulatory controls that duplicate or exceed controls established by the Division . . . pursuant to specific statutory requirements or authorization." (PRC § 30418.) As such, the Legislature reserved to the Division the authority and the jurisdiction to regulate the specifics of downhole operations such as well stimulation and well completion techniques.

SB 4 requires operators to obtain a permit from the Division in order to perform well stimulation treatments. The permit application must include detailed information about the fluids to be used, a water management plan, and a ground water monitoring plan. Copies of the approved permit must be sent to

neighboring property owners and tenants, and water testing must be provided by the operator upon a neighbor's request. Following well stimulation treatments, operators are required to publicly disclose detailed information regarding the composition and disposition of the well stimulation fluids used.

SB 4 requires the Division to prepare comprehensive regulations to ensure that well stimulation treatments are done safely. (PRC sections 3160(b)(1) and 3161.) The regulations must address important operational requirements associated with well stimulation treatment activities, such as pressure testing, well evaluation, geologic evaluation, well monitoring, and storage and handling of fluids. The regulations must also implement SB 4's neighbor notification and public disclosure requirements, in order to promote transparency and accountability in the practice of well stimulation techniques.

SB 4 requires the Division to consult with the Department of Toxic Substances Control, California Air Resources Board, State Water Resources Control Board and various other state and local agencies as it develops its regulations. (PRC section 3160(b)(1) and (c)(1).) In addition, it requires the Natural Resources Agency to complete an independent scientific study on well stimulation treatments, including hydraulic fracturing, for the purpose of informing the public and guiding the Division's ongoing efforts to regulate well stimulation treatments in the state. (PRC section 3160(a).) Simultaneously, the Division must prepare an environmental impact report ("EIR"), consistent with the California Environmental Quality Act ("CEQA"), addressing the practice of well stimulation in California. (PRC section 3161(b)(3)-(4).) Along with the independent scientific study, the EIR will evaluate and inform decision-makers and the public of potential environmental impacts of well stimulation activities in the state. SB 4 requires the Division to develop an internet website to facilitate public disclosure of detailed well stimulation information, and the website must allow the public to easily search and aggregate the information. (PRC section 3160(g).) Finally, the State Water Resources Control Board is required by SB 4 to develop model groundwater monitoring criteria for implementation on both localized and regional scales to ensure surface and groundwater are not adversely impacted by ongoing well stimulation activities in the state. (California Water Code section 10783.)

SB 4 thus created a specific regulatory framework under which hydraulic fracturing and other well stimulation techniques are authorized to occur in the state. SB 4 did not confer upon the Commission any jurisdiction over well drilling or completion operations, but instead directed the Division to pursue regulatory action regarding well stimulation, including the practice of hydraulic fracturing. Consequently, the Commission cannot effectively prohibit hydraulic fracturing under its power to require permits for coastal "development." That regulatory authority is reserved to the Division pursuant to PRC § 30418.

The Commission may, however, regulate, in general, oil and gas development in the coastal zone, to ensure that operations constituting "development" are consistent with the policies of the Coastal Act. Any mitigation measures the Commission might seek to impose to ensure such operations are consistent with the Coastal Act could be challenged to the extent they duplicate or exceed the controls established by the Division pursuant to its authority under SB 4.

Coastal Commission Jurisdiction—Federal Waters

CBD argues the Commission should assert its consistency review jurisdiction any time an operator proposes to complete a well using hydraulic fracturing on the Outer Continental Shelf ("OCS").

It is CIPA's conclusion that OCS regulations preclude Commission consistency review of any subsea well completion operations that are adequately described in an approved OCS plan. By adequately described, we mean that the OCS plan must contain a general discussion of the proposed well completion activities, including the likely chemicals to be used, and manner in which they are to be stored, handled and disposed. This does not mean that the term "hydraulic fracturing" must actually appear in the

discussion, or anywhere in the approved OCS plan. To preclude Commission consistency review, the proposed well completion operation need only be described with sufficient specificity to support a determination by the Bureau of Ocean Energy Management ("BOEM"), pursuant to 30 CFR §550.283, that a Revised or Supplemental OCS Plan is not required. In situations where proposed subsea well completion operations and their effects are not adequately described in an approved OCS plan, such that a Revised or Supplemental OCS Plan may be required, the Commission has the authority to request CZMA consistency review, through either its "federal license and permit" consistency review authority for "unlisted" activities (15 CFR § 930.54), or the procedures which authorize it to "weigh in" on decisions regarding proposed OCS plan revisions. (15 CFR § 930.51(c) and (e).)

OCS regulations require operators to submit a "Revised OCS Plan" whenever they propose changes which deviate from an approved plan. (30 CFR §550.283.) For example, whenever an operator proposes to alter the type of drilling rig, change the surface location of a well, change the type of production, significantly increase the volume of production or storage capacity, increase the emissions of an air pollutant to an amount that exceeds the amount specified in the approved plan, or significantly increase the amount of solid or liquid wastes to be handled or discharged, OCS regulations require operators to submit to BOEM a "Revised OCS Plan." (30 CFR § 550.283(a).) On the other hand, whenever operators propose additions to approved OCS plans to conduct activities that require approval of a license or permit which are not identified or described in their approved OCS plans, the regulations require operators to submit to BOEM a "Supplemental OCS Plan." (30 CFR §550.283(b).) In this regard, "Revised OCS Plans" are intended to address proposed changes to approved OCS plans, while "Supplemental OCS Plans" are intended to address proposed additions to approved OCS plans. (See also definitions of "Revised" and "Supplemental" OCS Plans in 30 CFR § 550.200(b).)

The distinction is important because Revised OCS Plans are treated differently from Supplemental OCS Plans for processing purposes. Revised OCS Plans are not subject to automatic environmental review and separate CZMA consistency review, while Supplemental OCS Plans are subject to automatic environmental review and separate CZMA consistency review. (30 CFR § 550.285(c).)

The CZMA regulations found at 15 CFR §§ 930.50 - 930.66 govern consistency reviews for activities requiring a federal license or permit. 15 CFR § 930.51(a) defines "federal license or permit" to mean any authorization that an applicant is required by law to obtain from a federal agency in order to conduct activities affecting the coastal zone. 15 CFR § 930.51(a) specifically excludes from the definition of "federal license or permit" OCS plans, and federal license or permit activities described in detail in OCS plans. As such, any federal license or permit activity adequately described in an approved OCS plan is not subject to the separate consistency review procedures set forth in 15 CFR §§ 930.50 - 930.66. On the other hand, those federal license or permit activities that are not adequately described in an approved OCS plan are subject to the separate consistency review procedures set forth in 15 CFR §§ 930.50 - 930.66.

15 C.F.R. § 930.51(c) addresses "major amendments" to previously reviewed and approved federal license and permit activities, such as OCS plans. 15 C.F.R. § 930.51(c) defines "major amendment" to mean "any subsequent federal approval that the applicant is required to obtain for modification to the previously reviewed and approved activity . . . where the activity permitted by issuance of the subsequent approval will affect any coastal use or resource, or . . . affect any coastal use or resource in a way that is substantially different than the description or understanding of effects at the time of the original [permitted] activity." As demonstrated above, well stimulation does not affect any coastal use or resource in a way that is "substantially different" than the original permitted activity and are therefore does not trigger a major amendment.

Water Discharges in Federal Water

Offshore oil and gas development, and especially discharges of Drilling Fluids and Cuttings, Produced Water, Well Treatment, Completion, and Workover fluids, are addressed in a December, 2013 General NPDES permit for oil and gas exploration, development, and production facilities offshore of California (CAG280000). The findings and protections in the permit are based on more than 25 years' worth of chemical and aquatic testing of different types of chemicals.

The most comprehensive compilations of these findings are presented in the EPA's Decision Documents for *Effluent Limitations Guidelines and New Source Performance Standards for the Offshore Subcategory*. These were published in 1993, 1996, and 2000 to support amendments to the offshore permit. The EPA's development document includes consideration of the different technologies used for offshore oil and gas development, and includes specific discussion of hydraulic fracturing and acidization. It also includes specific consideration of NORM including a NORM study. The goal of the document was to establish best available control technologies for water quality protection, based on the compilation of numerous studies of the effects of chemicals used in oil and gas development on the marine environment.

CBD's letter suggested that the discharge of various fluids from offshore platforms are poorly characterized, and pose an undue risk to the marine environment. This is simply not true. These EPA *Development Documents*, themselves more than 500 pages each, summarize numerous other studies by industry, academia, and agencies including the EPA itself. Testing requirements, protocols and frequencies are clearly tied to the anticipated chemicals used in each process of offshore oil and gas production, including hydraulic fracturing and acidization. The chemicals and chemical families used for hydraulic fracturing are fully addressed in these *Development Documents*. For example, of the seven compounds listed in the CBD comment letter to the Commission on this matter, all of these classes of compounds have been considered in the *Development Documents* and supporting studies. The chemicals are not new, and they have already been analyzed.

Still, in the EPA's December, 2013 General NPDES permit for oil and gas production offshore of California (CAG280000), there have been two specific changes intended to further characterize the nature of chemicals that may be used in offshore hydraulic fracturing. The first is an increase in the frequency of monitoring produced water; the Whole Effluent Toxicity test has been increased to quarterly, with provisions for a Toxicity Identification Evaluation in the event the toxicity test does not meet the standards. The concerns expressed in comment letters regarding effects to marine biota are the specific purpose for running these whole effluent toxicity tests. The increased testing required by the EPA is a direct response to this concern. The second additional provision is for new chemical inventory and reporting requirements. The intent of this is to ensure that the chemicals that have already been addressed by this permit, and evaluated in the 3 *Development Documents* I mentioned, are still comprehensive. Notwithstanding that, the *Development Documents* already address the types of additives used in hydraulic fracturing, the inventory requirement is there to provide an additional layer of protection.

CIPA firmly believes that as staff conducts their evaluation, they will find that offshore well stimulation is already well understood and that our natural resources are fully protected. Please contact us if you have any questions.

Sincerely,



Rock Zierman
CEO

